

Amendments to the Claims:

Claim 1 (Currently amended) An ink-jet printing apparatus,
comprising:

~~at least one a~~ printhead portion including an underprinting fixer
fluid comprising ~~at least one a~~ cationic component polymer and ~~at least~~
~~one a~~ printhead portion including an ink composition comprising at
~~least one an~~ anionic component, the anionic component comprising a
water-soluble anionic binder and a water-soluble dye, the anionic
binder comprising polymers having a complexing group, the
complexing group being selected from the group consisting of Ethylene
Diamine Tetraacetic Acid, Acetyl Acetate Maleic Anhydride, an
Acrylate and combinations thereof;

wherein the cationic polymer is a polyelectrolyte selected from the
group consisting of $R_1R_2R_3R_4N^+$, $R_1R_2R_3R_4P^+$ and $R_1R_2R_3R_4As^+$, and
where R can be H, alkyl or other organic substituent, and where the
polyelectrolyte is from 2000 up to 10,000 weight average molecular
weight;

and wherein the cationic polymer is in solution with non-polymeric
cations selected from the group consisting of calcium ions, aluminum
ions, barium ions, strontium ions, zinc ions, magnesium ions and
titanium ions;

and wherein, when the ink composition is printed on a medium over the
fixer fluid printed on the medium, the ink composition and fixer fluid
together form an amorphous viscous fluid, the viscous fluid having a
viscosity greater than the ink composition.

Claim 2 (Canceled)

Claim 3 (Canceled)

Claim 4 (Canceled)

Claim 5 (Currently amended) The apparatus of Claim 31, wherein
the cationic polymers comprises styrene.

Claim 6 (Currently amended) The apparatus of Claim 41, wherein the

anionic binder comprises hydrolyzed styrene maleic anhydride.

Claim 7 (Currently amended) The apparatus of Claim 1, wherein the ~~anionic component comprises dye~~ in the anionic component has having anionic functional groups.

Claim 8 (Currently amended) The apparatus of Claim 7, wherein the dyes having anionic functional groups are is selected from the group consisting of sulfonated dyes with non-polar groups, dyes with protonatable groups, dyes with carboxylate groups and dyes with phosphonate groups.

Claim 9 (Original) The apparatus of Claim 1, wherein the ink composition further comprises low-molecular weight hydrophilic compounds.

Claim 10 (Original) The apparatus of Claim 9, wherein the low-molecular weight hydrophilic compounds are selected from the group consisting of inorganic salts and lower alcohols.

Claim 11 (Canceled)

Claim 12 (Canceled)

Claim 13 (Currently amended) The apparatus of claim 42 1, wherein the polyelectrolytes comprises branched or linear polymer chains.

Claim 14 (Canceled)

Claim 15 (Currently amended) The apparatus of Claim 42 1, wherein the cationic polymers are is tetrasubstituted ammonium salts.

Claim 16 (Canceled)

Claims 17-33 (Canceled)

Claim 34 (Currently amended) A method of ink-jet printing, the method comprising the steps of:

- a) ejecting at a location on a medium an underprinting fixer fluid comprising at least one cationic ~~component~~ polymer;
- b) ejecting at the location on the medium an ink composition comprising at least one anionic component; the anionic component comprising a water-soluble anionic

binder and a water-soluble dye, the anionic binder comprising polymers having a complexing group, the complexing group being selected from the group consisting of Ethylene Diamine Tetraacetic Acid, Acetyl Acetate Maleic Anhydride, an Acrylate and combinations thereof;

wherein the cationic polymer is a polyelectrolyte selected from the group consisting of $R_1R_2R_3R_4N^+$, $R_1R_2R_3R_4P^+$ and $R_1R_2R_3R_4As^+$, and where R can be H, alkyl or other organic substituent, and where the polyelectrolyte is from 2000 up to 10,000 weight average molecular weight;

and wherein the cationic polymer is in solution with non-polymeric cations selected from the group consisting of calcium ions, aluminum ions, barium ions, strontium ions, zinc ions, magnesium ions and titanium ions;

and wherein the ink composition and the fixer fluid together form an amorphous viscous fluid, the viscous fluid having a viscosity greater than the ink composition.

Claim 35 (Canceled)

Claim 36 (Canceled)

Claim 37 (Canceled)

Claim 38 (Currently amended) The method of Claim 36 34, wherein the ~~branched~~ cationic polymers comprises styrene.

Claim 39 (Currently amended) The method of claim ~~37~~ 34, wherein the anionic binder comprises hydrolyzed styrene maleic anhydride.

Claim 40 (Currently amended) The method of Claim 34, wherein the ~~at least one dye in the~~ anionic component ~~comprises dye having~~ has anionic functional groups.

Claim 41 (Currently amended) The method of Claim 40, wherein the dyes having anionic functional groups ~~are~~ is selected from the group consisting of sulfonated dyes with non-polar groups, dyes with protonatable groups, dyes with carboxylate groups and dyes with phosphonate groups.

Claim 42 (Original) The method of Claim 34, wherein the ink composition further comprises low-molecular weight hydrophilic compounds.

Claim 43 (Original) The method of Claim 42, wherein the low-molecular weight hydrophilic compounds are selected from the group consisting of inorganic salts and lower alcohols.

Claim 44 (Canceled)

Claim 45 (Canceled)

Claim 46 (Currently amended) The method of Claim 45 34, wherein the polyelectrolytes comprises branched polymer chains.

Claim 47 (Canceled)

Claim 48 (Currently amended) The method of Claim 45 34, wherein the cationic polymers ~~are~~ is tetrasubstituted ammonium salts.

Claim 49 (Canceled)

Claims 50-57 (Canceled)